

## REMARKS

The specification and drawings have been amended to correct minor errors noted in the Office Action. These corrections are of a clerical nature and do not add "new matter".

Upon entry of the forgoing amendments, claims 1-8, 13, 25, and 26 are pending in this application with claims 1, 5, 13, 25, and 26 being independent claims. No claim is allowed.

Claims 1, 5, 13, 25, and 26 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. Support for these changes may be found in the specification in FIG. 3 and on page 8, line 14 through page 9, line 11 and in FIG. 5 and on page 16, line 9 through page 17, line 2, among others.

### Objection to Drawings

FIGS. 1-3 stand objected to for failing to carry the legend Prior Art. With this paper, this legend has been added to the figures as instructed.

FIG. 5 stands objected to for lacking clarity with respect to the designations X1 and X2. With this paper, these designations have been given more specificity.

### The 35 U.S.C. § 112 Rejection

Claim 1 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter applicant regards as the invention. This rejection is respectfully traversed.

Specifically, the Office Action states that the claim language of "the results" is not clear. With this paper, the claims have been amended to clarify the claim language.

With this amendment, it is respectfully asserted that the claims satisfy the statutory requirements and are in condition for allowance.

The 35 U.S.C. § 103 Rejection

According to M.P.E.P. § 2143,

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.

Claims 1-8, 13, 25, and 26 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Gruetzner et al.* (US 5,444,715) in view of *Parker et al.* (US 5,513,188). This rejection is respectfully traversed.

Generally, the Office Action states that *Gruetzner* discloses or suggests all of the claim elements and limitations except for boundary scan cells which are generically disclosed by *Parker*. However, *Gruetzner* fails to address testing AC *coupled* interconnects as variously claimed. First, there is no capacitor shown or discussed by *Gruetzner*. Thus the line 124 of FIG. 1 and the lines 324 and 334 of FIG. 3 of *Gruetzner* are not "AC coupled interconnections" as claimed. According to the terminology of the Applicant, these lines are DC coupled only. Second, the test data of *Gruetzner* is disclosed to be a single voltage transition. (See column 4, lines 56-59.) By contrast, the claimed AC test stimulus has "a plurality of voltage transitions". Given these differences, one can not say that the presently claimed invention is rendered obvious by the cited prior art.

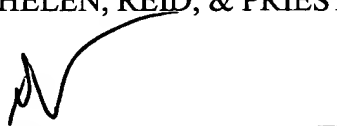
In view of the above, it is respectfully asserted that the claims are now in condition for allowance.

Request for Allowance

In view of the foregoing, reconsideration and an early allowance of this application are earnestly solicited.

If any matters remain which could be resolved in a telephone interview between the Examiner and the undersigned, the Examiner is invited to call the undersigned to expedite resolution of any such matters. Please charge any additional required fee or credit any overpayment not otherwise paid or credited to our deposit account No. 50-1698.

Respectfully submitted,  
THELEN, REID, & PRIEST LLP

A handwritten signature in black ink, appearing to be 'DR', is written over a horizontal line.

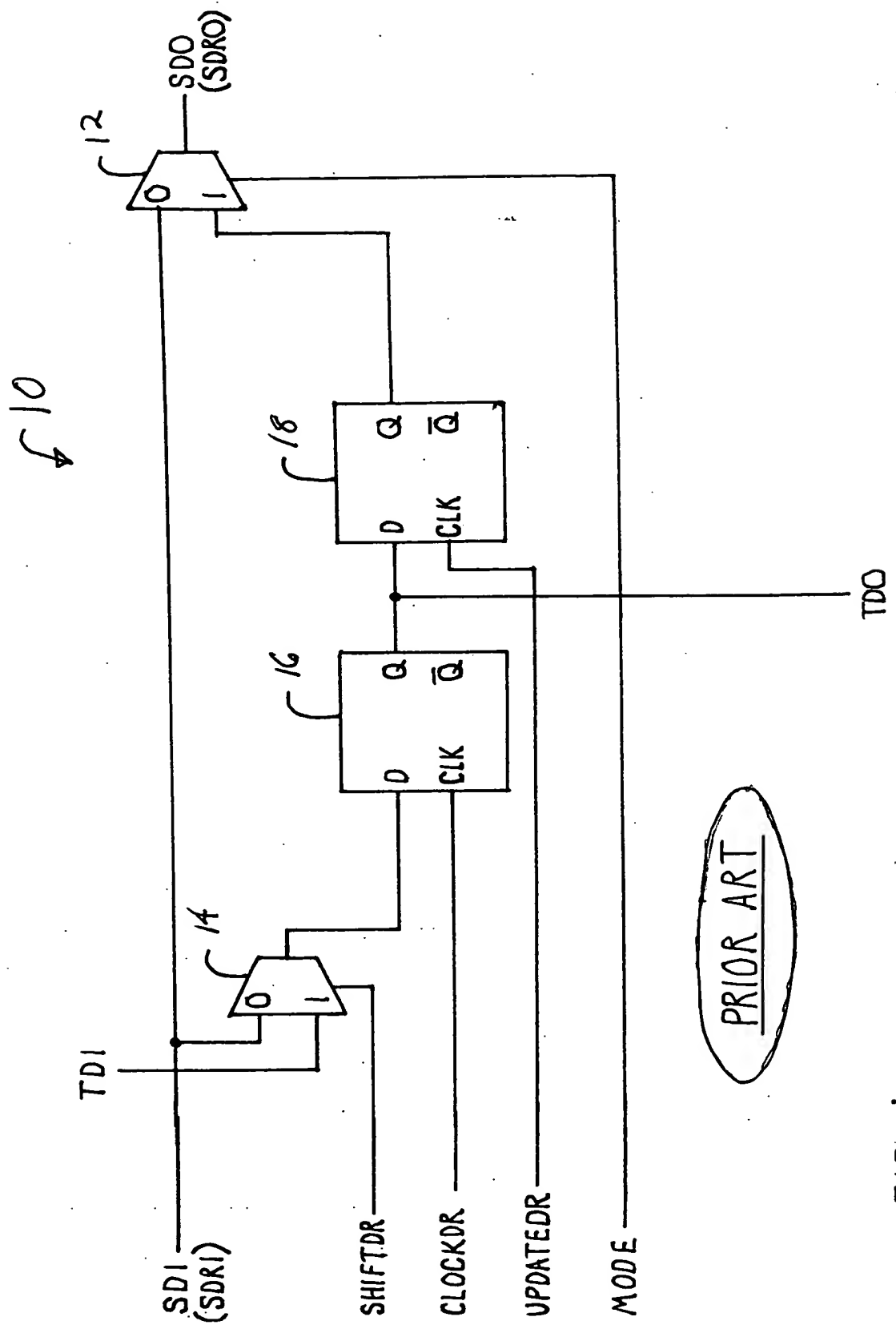
David B. Ritchie  
Reg. No. 31,562

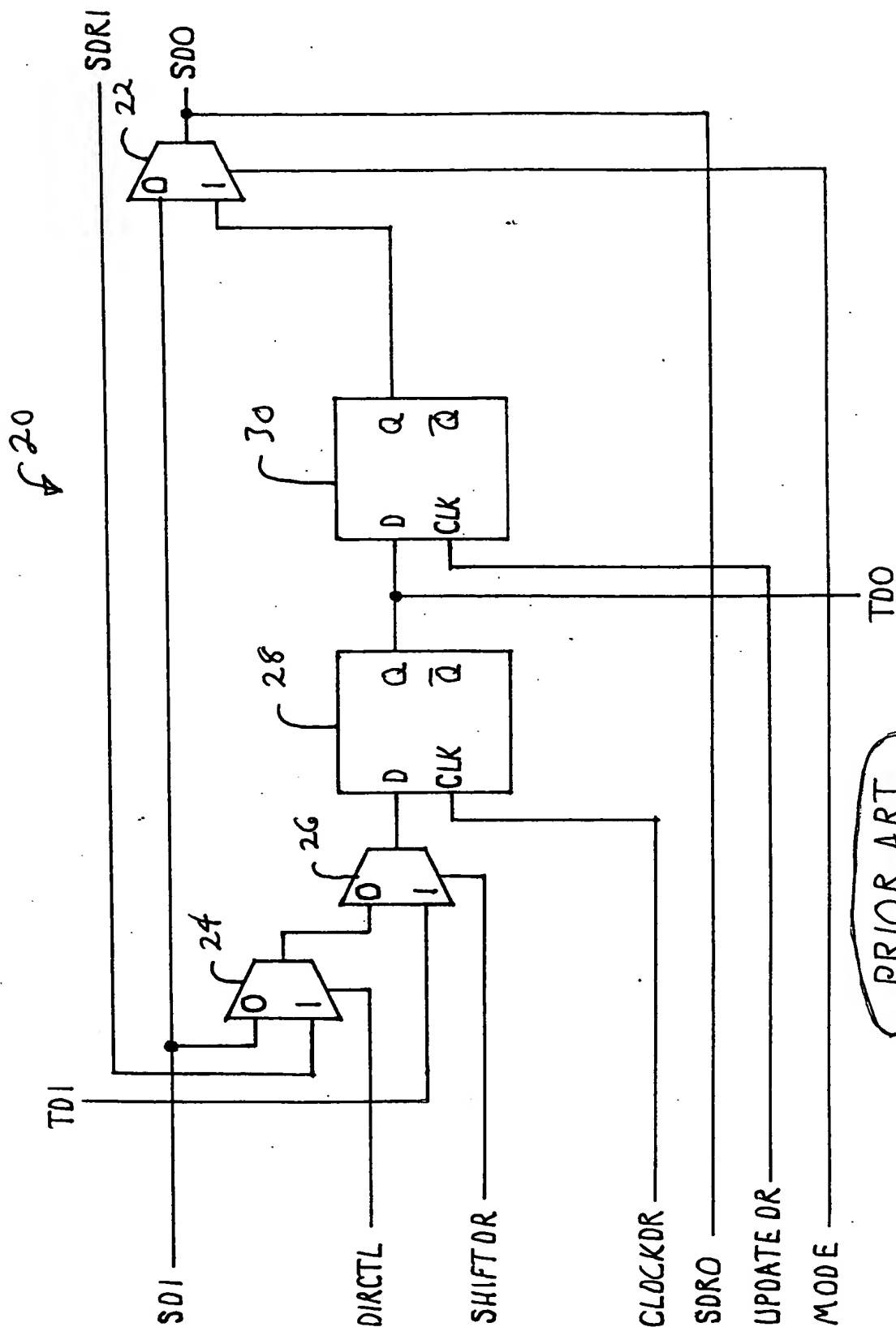
Dated: August 20, 2004

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ABSTRACT OF THE DISCLOSURE

~~A system for and method of testing~~ Testing AC coupled interconnects using boundary scan test methodology. Specially designed AC boundary scan cells and boundary scan logic are used. These are ~~intended to be~~ compatible with ~~conventional~~ IEEE Standard 1149.1 testing. ~~A method known as~~ An AC\_EXTEST is used to determine the reliability of the AC coupled interconnections. The method includes preloading the test stimulus, initiating the *AC\_EXTEST* instruction, executing the *AC\_EXTEST* instruction, transferring the *AC\_EXTEST* instruction results, and evaluating the *AC\_EXTEST* results. During the test, the TAP ~~controller~~ controllers of both the driving IC and the receiving IC ~~is~~ ICs are held in the *Run-Test/Idle* state for the time required to complete execution of the instruction. During this ~~controller state time~~, the driving IC is applying the AC test stimulus to the interconnections and the receiving IC is sampling the signal. The test may be repeated with different test data and may be run together with a ~~conventional~~ DC *EXTEST* method to determine the reliability of both the AC and the DC coupled interconnections independently.





PRIOR ART

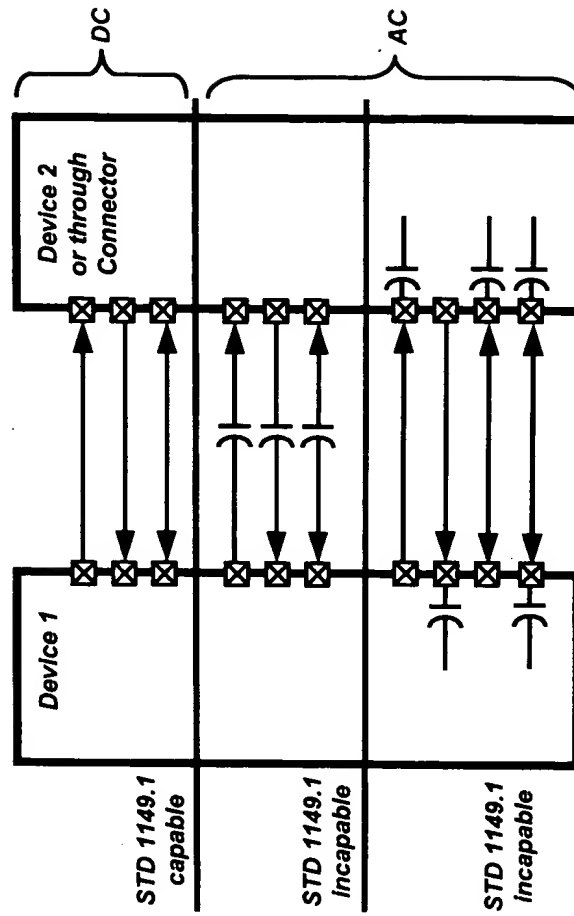


FIG. 3

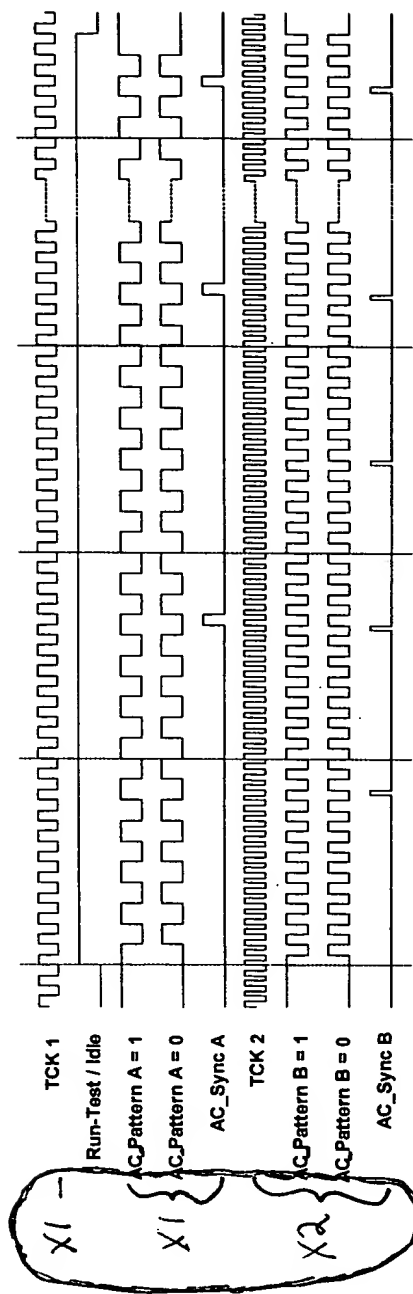


FIG. 5